Survey Methodology and Procedures

Survey Objective

The objective of the 1996 Equine Survey was to determine equine inventory and basic characteristics of the industry in North Carolina as well as measure the economic contribution that equine have on the state's economy.

Survey Design

The 1996 North Carolina Equine Survey was conducted utilizing two separate surveys. The first survey concentrated on inventory and industry characteristics and a follow-on survey examined economic issues. The inventory survey employed a multiple frame sampling scheme that utilized both a List Sampling Frame (LSF) and an Area Sampling Frame (ASF). The follow-on survey that examined economic issues was conducted using a sample of the initial survey.

List Sampling Frame

A list frame is a sampling frame consisting of a list of individuals or business that make up the population from which a sample will be selected. For this survey, a list frame for equine owners and operators was developed through breeding associations, veterinarians, Extension Service, riding clubs and other sources to provide the most complete and diverse coverage possible. The various lists were formatted to a common data base and duplication removed prior to mailing the questionnaire. Everyone on the list frame was mailed an inventory and basic characteristics questionnaire because there was not adequate control data to stratify and sample the population. A second request mailing, telephone and personal interviews were used to contact nonrespondents. The economic follow-on survey utilized a stratified sample of the respondents from the initial survey based on the number of equine on the operation.

Area Sampling Frame

An area sample was necessary to estimate equine not accounted for by the list frame because available resources made it impossible to develop a complete list of equine owners and operators. The Area Sampling Frame is a sampling frame that consists of all land area in North Carolina from which a sample of land segments is selected. In constructing the ASF, the land is stratified upon land usage. The resulting strata are composed of segments, which are pieces of land with easily identifiable boundaries. All segments within the same stratum are targeted to be approximately the same size. Each segment is composed of tracts. A tract is an area of land, wholly contained within a segment, that is under a single operation or management. Equine data identified in the area tracts were expanded to represent equine in similar tracts across the state.